Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 through 45 (canceled).

Claim 46 (new) A device comprising:

a demultiplexer configured to receive a channelized synchronous optical network (SONET) data stream and separate the channelized SONET data stream into constituent tributary data streams, the tributary data streams including

a packet over SONET (POS) tributary data stream, and

an asynchronous transfer mode (ATM) tributary data stream; and

a line card coupled to the demultiplexer and configured to provide the demultiplexer with the channelized SONET data stream.

Claim 47 (new) The device of claim 46, wherein the data stream is received over a single optical fiber.

Claim 48 (new) The device of claim 46, wherein the tributary data streams additionally include a Point to Point Protocol (PPP) over a DS tributary data stream.

Claim 49 (new) The device of claim 46, wherein the channelized SONET data stream has an optical carry (OC) rate in accordance with the SONET standard.

Claim 50 (new) The device of claim 46, wherein the POS tributary data stream has an optical carry rate in accordance with the SONET standard.

Claim 51 (new) The device of claim 46, wherein the ATM tributary data stream has an optical carry rate in accordance with the SONET standard.

Claim 52 (new) The device of claim 46, wherein the tributary data streams additionally include:

a composite tributary data stream that includes a POS tributary data stream and an ATM tributary data stream.

Claim 53 (new) One or more devices in a data processing environment comprising:

a multiplexer configured to receive tributary data streams including

a packet over synchronous optical network (POS) tributary data stream, and

an asynchronous transfer mode (ATM) tributary data stream,

the multiplexer being further configured to combine the tributary data streams into a single channelized synchronous optical network (SONET) data stream; and

a line card coupled to the multiplexer and configured to receive the single channelized SONET data stream.

Claim 54 (new) The one or more devices of claim 53, wherein the tributary data streams additionally include a Point to Point Protocol (PPP) over a DS tributary data stream.

Claim 55 (new) The one or more devices of claim 53, wherein the channelized SONET data stream has an optical carry (OC) rate in accordance with the SONET standard.

Claim 56 (new) The one or more devices of claim 53, wherein the POS tributary data stream has an optical carry rate in accordance with the SONET standard.

Claim 57 (new) The one or more devices of claim 53, wherein the ATM tributary data stream has an optical carry rate of in accordance with the SONET standard.

Claim 58 (new) The one or more devices of claim 53, wherein the tributary data streams additionally include:

a composite tributary data stream that includes a POS tributary data stream and an ATM tributary data stream.

Claim 59 (new) A forwarding node for directing data in a network, the forwarding node including:

means for creating tributary synchronous optical network (SONET) data streams, the tributary SONET data streams including

a packet over synchronous optical network (POS) tributary data stream, and

an asynchronous transfer mode (ATM) tributary data stream; and

means for transmitting the tributary SONET data streams as a single SONET data stream.

Claim 60 (new) The forwarding node of claim 59, wherein the tributary data streams additionally include a Point to Point Protocol (PPP) over a DS tributary data stream.

Claim 61 (new) The forwarding node of claim 59, wherein the single SONET data stream has an optical carry (OC) rate in accordance with the SONET standard.

Claim 62 (new) The forwarding node of claim 59, wherein the POS tributary data stream has an optical carry rate in accordance with the SONET standard.

Claim 63 (new) The forwarding node of claim 59, wherein the ATM tributary data stream has an optical carry rate in accordance with the SONET standard.

Claim 64 (new) The forwarding node of claim 59, wherein the tributary data streams additionally include:

a composite tributary data stream that includes a POS tributary data stream and an ATM tributary data stream.

Claim 65 (new) A method for transmitting information over a fiber optic cable, the method comprising:

constructing a packet over synchronous optical network (POS) data stream;

constructing an asynchronous transfer mode (ATM) data stream;

combining the POS data stream and the ATM data stream into a single channelized synchronous optical network (SONET) data stream; and

transmitting the single SONET data stream.

Claim 66 (new) The method of claim 65, wherein the single SONET data stream is transmitted over a single fiber optic cable.

Claim 67 (new) The device of claim 65, wherein the channelized SONET data stream has an optical carry (OC) rate in accordance with the SONET standard.

Claim 68 (new) The device of claim 65, wherein the POS tributary data stream has an optical carry rate in accordance with the SONET standard.

Claim 69 (new) The device of claim 65, wherein the ATM tributary data stream has an optical carry rate in accordance with the SONET standard.